ELSEVIER

Journal of Materials Processing Technology 150 (2004) 317

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Author Index of Volume 150

Ağan, S., 208
Aksoy, İ., 208
Alasti, M., 92
Alberti, N., 2
Arenas Reina, J.M., 223
Asakawa, M., 10
Aspinwall, D.K., 116

Balendra, R., 30, 84
Bryant IV, I.H., 151
Byrne, G., 201

Cai, J., 48
Chan, C.L., 242
Chang, K.-H., 151
Chen, X., 170

Damodaran, D., 70
Danckert, J., 40
Dean, T.A., 48
Dewes, R.C., 116
Doege, E., 92
Dohmann, F., 18
Duan, X., 100
Dunne, P., 201

Fischer, F.D., 263
Fratini, L., 2

Gantar, G., 163
Garcia, A., 255
Gaya, C.G., 223
Gustafsson, T.E., 309
Güven, K., 208

Hama, T., 10
Hamouda, A.M.S., 242
Hartl, Ch., 18
Hu, J.H., 62
Hu, X.L., 56
Hu, Z.M., 48
Hua, J., 124
Huang, S.D., 56

Jiang, H., 194
Juster, N.P., 182

Kadkhodaei, M., 215
Kahveci, N., 208
Kang, D.C., 40
Khalid, Y.A., 242
Kiritani, M., 300
Konishi, M., 300
Koskinen, J., 309
Kuzman, K., 163

Lang, L.H., 25, 40
Levy, B.S., 280
Li, G.Y., 76
Li, R., 170
Liew, K.M., 76
Lin, T., 170
Liu, F., 175
Liu, G., 56
Liu, M., 234
Liu, Y., 145, 290
Lou, Z., 194

Ma, Y., 30
Makarovič, M., 163
Makinouchi, A., 10
Manarvi, I.A., 182
Matsugi, K., 300

Nielsen, K.B., 40

Paro, J.A., 309
Pauskar, P., 107
Peng, X., 84, 145
Phadke, S., 107

Qin, Y., 1, 30, 84, 145

Ruan, X., 194

Sahari, B.B., 242
Salimi, M., 215
Santos, C.A., 255
Sarı, U., 208
Schmidt-Jürgensen, R., 92
Schreiner, W.E., 263
Sebastián Pérez, M.Á., 223
Sheppard, T., 100
Shi, Y.H., 62
Shivpuri, R., 70, 107, 124
Soe, S.P., 201
Soo, S.L., 116
Spim, J.A., 255
Spinelli, J.E., 255
Stringfield, J.M., 280
Sun, C.G., 263

Takagi, J.-i., 234
Tan, M.J., 76
Tang, Q.B., 56
Teng, B.G., 25
Tosetti, J.P., 255
Tsukuda, A., 234

Van Tyne, C.J., 280
Venus, A., 201

Wang, L., 170
Wang, R.W., 56
Wang, Z.J., 25
Wang, Z.R., 25, 56
Werner, E.A., 263
Whalley, D.C., 134
Wheatley, A.R., 201

Xiong, S., 175

Yanagisawa, O., 300
Yang, C., 170
Yang, H., 290
Yasar, M., 270
Yi, S., 175
You, L.H., 62
Yuan, S.J., 25

Zhan, M., 290
Zhang, J., 175
Zhang, J.J., 62
Zhang, L.B., 56
Zhang, S.H., 40

Elsevier B.V.
doi:10.1016/S0924-0136(04)00808-8

ELSEVIER

Journal of Materials Processing Technology 150 (2004) 318–321

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Subject Index of Volume 150

Adaptation part-process
Parametric classification based on technico-economic approaches to optimize the design and manufacturing of hot forged parts, 223
Aircraft torque tube
Concurrent design and manufacturing of aircraft torque tubes, 151
Analysis accuracy
Accurate friction and heat transfer laws for enhanced simulation models of precision forging processes, 92
Assembly design
Framework of an integrated tolerance synthesis model and using FE simulation as a virtual tool for tolerance allocation in assembly design, 182
Asymmetrical rolling
Slab analysis of asymmetrical sheet rolling, 215
Automotive parts
FE simulation for concurrent design and manufacture of automotive sheet-metal parts, 145

Bearing steel
Effect of tool nose radius and tool wear on residual stress distribution in hard turning of bearing steel, 234
Bending strength
Bending behaviour of corrugated web beams, 242
Blade with a damper platform
Deformation characteristic of the precision forging of a blade with a damper platform using 3D FEM analysis, 290
Bulk forming
Applications of numerical simulation to the analysis of bulk-forming processes—case studies, 56

CAE
Innovative sheet metal forming processes: numerical simulations and experimental tests, 2
Hydroforming-applications of coherent FE-simulations to the development of products and processes, 18
CBN tool
Effect of tool nose radius and tool wear on residual stress distribution in hard turning of bearing steel, 234
Chip formation
3D FE modelling of the cutting of Inconel 718, 116
Chip morphology
Prediction of chip morphology and segmentation during the machining of titanium alloys, 124
Concurrent design and manufacture
Pressurising materials and process design considerations of the pressure-assisted injection forging of thick-walled tubular components, 30
FE simulation for concurrent design and manufacture of automotive sheet-metal parts, 145
Concurrent design and manufacturing of aircraft torque tubes, 151
Constitutive equation
The influence of the constitutive equation on the simulation of a hot rolling process, 100
Cooling rates
Dispersion-strengthening effect of Cu-based Mn, Al, and Zn rich alloys, 208
Corrugation direction
Bending behaviour of corrugated web beams, 242
Corrugation radius
Bending behaviour of corrugated web beams, 242
Crack propagation
3D FE modelling of the cutting of Inconel 718, 116
Cross-sectional area
Bending behaviour of corrugated web beams, 242
Cutting
3D FE modelling of the cutting of Inconel 718, 116

3D rigid–viscoplastic FEM
Deformation characteristic of the precision forging of a blade with a damper platform using 3D FEM analysis, 290
Design for manufacture
Framework of an integrated tolerance synthesis model and using FE simulation as a virtual tool for tolerance allocation in assembly design, 182
Design optimization
Hydroforming-applications of coherent FE-simulations to the development of products and processes, 18
Concurrent design and manufacturing of aircraft torque tubes, 151
An industrial example of FE supported development of a new product, 163
Detonation forming
Gas detonation forming process and modeling for efficient spring-back prediction, 270
Dimensional accuracy
Study of the key technologies of LOM for functional metal parts, 175
Dispersion strengthening
Dispersion-strengthening effect of Cu-based Mn, Al, and Zn rich alloys, 208
Drilling
Drilling of X2CrNi 19 11 stainless steel with hiped NiTi coating, 309
Dynamic excitation
Finite element simulation of the dynamical behavior of a speed-increase gearbox, 170
Dynamic response
Finite element simulation of the dynamical behavior of a speed-increase gearbox, 170

Electric energy
Joining of spheroidal graphite cast iron to stainless steel by impact-electric current discharge joining, 300
Extrusion-upsetting
Applications of numerical simulation to the analysis of bulk-forming processes—case studies, 56

FCD450
Joining of spheroidal graphite cast iron to stainless steel by impact-electric current discharge joining, 300

Elsevier B.V.
doi:10.1016/S0924-0136(04)00809-X

FE analysis
Hydroforming-applications of coherent FE-simulations to the development of products and processes, 18
FE modelling
3D FE modelling of the cutting of Inconel 718, 116
FE simulation
Innovative sheet metal forming processes: numerical simulations and experimental tests, 2
Pressurising materials and process design considerations of the pressure-assisted injection forging of thick-walled tubular components, 30
Key technologies of the simulation of the hydrodynamic deep drawing of irregular parts, 40
Analysis of laser-heating methods for micro-parts stamping applications, 84
FE simulation for concurrent design and manufacture of automotive sheet-metal parts, 145
Framework of an integrated tolerance synthesis model and using FE simulation as a virtual tool for tolerance allocation in assembly design, 182
Feature section
Deformation characteristic of the precision forging of a blade with a damper platform using 3D FEM analysis, 290
FEM
Prediction and control of part distortion during the hot extrusion of titanium alloys, 70
Prediction of chip morphology and segmentation during the machining of titanium alloys, 124
FE-modelling
Accurate friction and heat transfer laws for enhanced simulation models of precision forging processes, 92
Finite element
Alternative die designs in net-shape forging of gears, 48
Finite element analysis
Single-patch surfaces for tool shape design and finite element analysis of hot extrusion, 62
Finite element method
The influence of the constitutive equation on the simulation of a hot rolling process, 100
Finite element simulation of the dynamical behavior of a speed-increase gearbox, 170
Gas detonation forming process and modeling for efficient spring-back prediction, 270
Friction law
Accurate friction and heat transfer laws for enhanced simulation models of precision forging processes, 92

Gear forging
Alternative die designs in net-shape forging of gears, 48
Gearbox
Finite element simulation of the dynamical behavior of a speed-increase gearbox, 170

Hard turning
Effect of tool nose radius and tool wear on residual stress distribution in hard turning of bearing steel, 234
Heat transfer law
Accurate friction and heat transfer laws for enhanced simulation models of precision forging processes, 92
Hot extrusion
Single-patch surfaces for tool shape design and finite element analysis of hot extrusion, 62
Prediction and control of part distortion during the hot extrusion of titanium alloys, 70
Hot forging
Parametric classification based on technico-economic approaches to optimize the design and manufacturing of hot forged parts, 223
Hot rolling
Computational modeling of phase transformations and mechanical properties during the cooling of hot rolled rod, 107
Hydrodynamic deep drawing
Key technologies of the simulation of the hydrodynamic deep drawing of irregular parts, 40
Hydroforming
Innovative sheet metal forming processes: numerical simulations and experimental tests, 2
Hydroforming-applications of coherent FE-simulations to the development of products and processes, 18
Simulation of some cases of hydroforming and viscous pressure forming, 25

Impact energy
Joining of spheroidal graphite cast iron to stainless steel by impact-electric current discharge joining, 300
Injection molding
Development of an integrated knowledge-based system for mold-base design, 194
Instability of pressurized tubes
Characterizing steel tube for hydroforming applications, 280
Inverse identification
Three-dimensional modeling and simulation of superplastic forming, 76

Joining
Joining of spheroidal graphite cast iron to stainless steel by impact-electric current discharge joining, 300

Knowledge-based system
Development of an integrated knowledge-based system for mold-base design, 194

Laminated object manufacturing
Study of the key technologies of LOM for functional metal parts, 175
Laser heating
Analysis of laser-heating methods for micro-parts stamping applications, 84

Mathematical modeling
Microstructure and solidification thermal parameters in thin strip continuous casting of a stainless steel, 255
Measurement
A simplified reflow soldering process model, 134
Metal/mold heat transfer coefficient
Microstructure and solidification thermal parameters in thin strip continuous casting of a stainless steel, 255
Microanalysis
Dispersion-strengthening effect of Cu-based Mn, Al, and Zn rich alloys, 208
Micro-forming
Analysis of laser-heating methods for micro-parts stamping applications, 84
Microstructural evolution
Computational modeling of phase transformations and mechanical properties during the cooling of hot rolled rod, 107
Microstructure
The influence of the constitutive equation on the simulation of a hot rolling process, 100
Microstructure and solidification thermal parameters in thin strip continuous casting of a stainless steel, 255
Mold-base design
Development of an integrated knowledge-based system for mold-base design, 194

Multistage processes
Investigation of factors which cause breakage during the hydroforming of an automotive part, 10

Net-shape
Alternative die designs in net-shape forging of gears, 48
NiTi coating
Drilling of X2CrNi 19 11 stainless steel with hiped NiTi coating, 309
Nose radius
Effect of tool nose radius and tool wear on residual stress distribution in hard turning of bearing steel, 234
Numerical simulation
Applications of numerical simulation to the analysis of bulk-forming processes—case studies, 56
An industrial example of FE supported development of a new product, 163

Parametric classification
Parametric classification based on technico-economic approaches to optimize the design and manufacturing of hot forged parts, 223
Part distortion
Framework of an integrated tolerance synthesis model and using FE simulation as a virtual tool for tolerance allocation in assembly design, 182
Phase transformation
Computational modeling of phase transformations and mechanical properties during the cooling of hot rolled rod, 107
Plate deflection
Slab analysis of asymmetrical sheet rolling, 215
Polymers
Pressurising materials and process design considerations of the pressure-assisted injection forging of thick-walled tubular components, 30
Precision forging
Accurate friction and heat transfer laws for enhanced simulation models of precision forging processes, 92
Deformation characteristic of the precision forging of a blade with a damper platform using 3D FEM analysis, 290
Pressure distributions
Slab analysis of asymmetrical sheet rolling, 215
Pressure-assisted forming
Pressurising materials and process design considerations of the pressure-assisted injection forging of thick-walled tubular components, 30
Process modelling
A simplified reflow soldering process model, 134
Product re-engineering
Concurrent design and manufacturing of aircraft torque tubes, 151

Quantitative selection
Parametric classification based on technico-economic approaches to optimize the design and manufacturing of hot forged parts, 223

Rapid prototyping
Concurrent design and manufacturing of aircraft torque tubes, 151
Some demands on rapid prototypes used as master patterns in rapid tooling for injection moulding, 201
Rapid tooling
Some demands on rapid prototypes used as master patterns in rapid tooling for injection moulding, 201
Reflow soldering
A simplified reflow soldering process model, 134
Residual stress
Effect of tool nose radius and tool wear on residual stress distribution in hard turning of bearing steel, 234
The temperature and stress fields developing in rolls during hot rolling, 263
Residual stresses in tubes
Characterizing steel tube for hydroforming applications, 280
Roll
The temperature and stress fields developing in rolls during hot rolling, 263
Rolling
The influence of the constitutive equation on the simulation of a hot rolling process, 100
Rotary forging
Applications of numerical simulation to the analysis of bulk-forming processes—case studies, 56

Sand moulding
Some demands on rapid prototypes used as master patterns in rapid tooling for injection moulding, 201
Semicircular corrugated web
Bending behaviour of corrugated web beams, 242
Sheet forming
Key technologies of the simulation of the hydrodynamic deep drawing of irregular parts, 40
FE simulation for concurrent design and manufacture of automotive sheet-metal parts, 145
Sheet metal
Study of the key technologies of LOM for functional metal parts, 175
Sheet metal forming
Innovative sheet metal forming processes: numerical simulations and experimental tests, 2
An industrial example of FE supported development of a new product, 163
Silicone moulding
Some demands on rapid prototypes used as master patterns in rapid tooling for injection moulding, 201
Simulation
Simulation of some cases of hydroforming and viscous pressure forming, 25
Single-patch surfaces
Single-patch surfaces for tool shape design and finite element analysis of hot extrusion, 62
Slab method
Slab analysis of asymmetrical sheet rolling, 215
Spinning
Innovative sheet metal forming processes: numerical simulations and experimental tests, 2
Spring-back prediction
Gas detonation forming process and modeling for efficient spring-back prediction, 270
Stainless steel
Drilling of X2CrNi 19 11 stainless steel with hiped NiTi coating, 309
Stamping
Analysis of laser-heating methods for micro-parts stamping applications, 84
Static explicit FEM
Investigation of factors which cause breakage during the hydroforming of an automotive part, 10
Steel tubes
Characterizing steel tube for hydroforming applications, 280
Strain path
Investigation of factors which cause breakage during the hydroforming of an automotive part, 10

The influence of the constitutive equation on the simulation of a hot rolling process, 100
Superplastic forming
Three-dimensional modeling and simulation of superplastic forming, 76
SUS304
Joining of spheroidal graphite cast iron to stainless steel by impact-electric current discharge joining, 300

Technico-economic approaches
Parametric classification based on technico-economic approaches to optimize the design and manufacturing of hot forged parts, 223
Temperature
A simplified reflow soldering process model, 134
Temperature field
The temperature and stress fields developing in rolls during hot rolling, 263
Three-dimensional finite element method
Three-dimensional modeling and simulation of superplastic forming, 76
Titanium alloys
Prediction and control of part distortion during the hot extrusion of titanium alloys, 70
Titanium machining
Prediction of chip morphology and segmentation during the machining of titanium alloys, 124
Tolerance synthesis
Framework of an integrated tolerance synthesis model and using FE simulation as a virtual tool for tolerance allocation in assembly design, 182
Tool shape design
Single-patch surfaces for tool shape design and finite element analysis of hot extrusion, 62
Tube hydroforming
Investigation of factors which cause breakage during the hydroforming of an automotive part, 10
Tubemaking
Characterizing steel tube for hydroforming applications, 280
Tubular components
Pressurising materials and process design considerations of the pressure-assisted injection forging of thick-walled tubular components, 30
Twin-roll
Microstructure and solidification thermal parameters in thin strip continuous casting of a stainless steel, 255

Virtual prototyping
Concurrent design and manufacturing of aircraft torque tubes, 151
Viscous pressure forming
Simulation of some cases of hydroforming and viscous pressure forming, 25

Weight reduction
Bending behaviour of corrugated web beams, 242
Weld line
Investigation of factors which cause breakage during the hydroforming of an automotive part, 10
Welding
Study of the key technologies of LOM for functional metal parts, 175